

REMARKS:

- 1) Referring to item 10) of the Office Action Summary, please indicate the acceptance of the drawings filed on May 18, 2005.
- 2) This is a Statement of Substance of Interview. On July 25, 2007, the undersigned attorney explained, and the Examiner agreed to, the following points. Item 6) of the Office Action Summary stating that "Claims 1-12 is/are rejected" is incorrect. To the contrary, some claims were not rejected but rather merely objected to. Referring to page 2 of the Office Action, the listing of claims rejected as anticipated by US Patent 6,488,767 (Xu et al.) is incorrect. Claim 6 should be rejected, because claim 6 recites that the processing solution contains Na, which was the focus of the Examiner's detailed remarks supporting the rejection. On the other hand, claim 7 should not be rejected, because claim 7 recites that the processing solution contains Li, which is the basis of the Examiner's Statement of Reasons for Allowable Subject Matter on page 3 of the Office Action. Thus, the claims actually rejected in view of Xu et al. are claims 1, 2, 4 to 6, 8 to 10 and 12. Referring to the top of page 3 of the Office Action, the claims actually reciting allowable subject matter are claims 3, 7 and 11.
- 3) Referring to the top of page 3 of the Office Action, the indication of allowable subject matter in original claims 3, 7 (rather than 6) and 11 (as corrected according to the Telephone Interview of July 25, 2007) is appreciated. These claims remain

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dependent and should still be recognized as reciting allowable subject matter. Furthermore, for the reasons that will be discussed below, it is submitted that currently amended independent claims 1, 5 and 9 are also allowable.

4) The claims have been amended as follows.

The claims have been amended where applicable in an editorial manner for improved streamlining, consistent terminology, and typical US claim format, compared to the original claims that were translated from foreign claims.

Each independent claim 1, 5 and 9 has been amended to recite that the liquid processing solution consists essentially of one or more members selected from the group consisting of Na, NaNH_2 , NaI, NaBr, NaCl, Li, LiNH_2 , LiI, LiBr, LiCl, LiF, Ca, CaI_2 , CaBr_2 , and CaCl_2 . This amendment is supported by the original disclosure of the written description at page 4 lines 7 to 11 and Table 1 on page 6, and thus does not introduce any new matter.

Claims 5 to 12 have been amended so that they no longer recite a "product-by-process" limitation, but rather are directed to a system comprising the semiconductor crystal and the liquid processing solution together in combination. Particularly, currently amended claims 5 to 12 are directed to a system comprising both the liquid processing solution and the nitride semiconductor crystal, wherein a surface of the crystal is brought into contact with the liquid processing solution. Such a system is provided according to the invention as an intermediate during the production step (for example see the

description at page 3 lines 6 to 9 and lines 21 to 23). Thus, this amendment does not introduce any new matter.

Entry and consideration of the claim amendments are respectfully requested.

- 5) Referring to page 2 of the Office Action, the rejection of claims 1, 2, 4 to 6, 8 to 10 and 12 (as corrected during the above discussed Telephone Interview) as anticipated by US Patent 6,488,767 (Xu et al.) is respectfully traversed.

Each of the present independent claims 1, 5 and 9 has been amended to recite that the liquid processing solution consists essentially of one or more members selected from the group consisting of Na, NaNH₂, NaI, NaBr, NaCl, Li, LiNH₂, LiI, LiBr, LiCl, LiF, Ca, CaI₂, CaBr₂, and CaCl₂. As disclosed in the present specification, the use of such a liquid processing solution achieves advantages according to the invention, particularly for example, the surface of the nitride semiconductor crystal can be processed to have a reduced depth of a surface scratch and/or a reduced thickness of a damaged surface layer, in comparison to the prior art processing methods using other processing solutions.

Xu et al. disclose processing a semiconductor wafer using a strong base such as carrying out chemical mechanical polishing (CMP) using a slurry containing NaOH (see col. 4 lines 40 to 59), or etching using a molten strong base such as molten NaOH (see col. 6 lines 7 to 11). However, Xu et al. do not disclose and would not have suggested using a liquid processing solution consisting essentially of one or more members selected from the

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group consisting of Na, NaNH₂, NaI, NaBr, NaCl, Li, LiNH₂, LiI, LiBr, LiCl, LiF, Ca, CaI₂, CaBr₂, and CaCl₂, as recited in each of the present amended independent claims 1, 5 and 9. Particularly, Xu et al. do not disclose such liquid processing solutions as presently claimed, and these would not have been suggested by the disclosure simply to use a strong base of NaOH.

In claims 5 and 9, the liquid processing solution is a positively recited element of the combination making up the claimed system. Thus, the composition of the liquid processing solution cannot be ignored as a product-by-process feature.

The dependent claims are patentably distinguishable over the prior art already due to their dependence.

For the above reasons, the Examiner is respectfully requested to withdraw the rejection of claims 1, 2, 4 to 6, 8 to 10 and 12 as anticipated by Xu et al.

- 6) Favorable reconsideration and allowance of the application, including all present claims 1 to 12, are respectfully requested.

Respectfully submitted,
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Enclosures:
Transmittal Cover Sheet

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